

# **LINUX ADMINISTRATORS: YOU MUST START HERE**

## **Operating System Support Notes for Red Hat Enterprise Linux AS v.2.1 on HP Carrier Grade Server cc3310**

**Edition 2**



**Manufacturing Part Number: 5990-7208  
E0304**

**U.S.A.**

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# 1 Operating System Support Notes for Red Hat Enterprise Linux AS v.2.1 on HP Carrier Grade Server cc3310

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## Announcement

You must have a service partition set up for your HP Carrier Grade Server cc3310 to be supported. The service partition should come pre-loaded. If not, set one up using the *hp server cc3310 user information diagnostics and utilities resource CD* before installing your Linux operating system. See “Preparing your HP Carrier Grade Server cc3310 for Operating System Installation” on page 8 for a comprehensive list of instructions.

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**NOTE** Please see the HP Carrier Grade Server cc3310 Product Guide for timesaving hardware configuration and installation information before installing your operating system.

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Hewlett-Packard has certified Red Hat Enterprise Linux AS v.2.1 and current errata (errata kernel 2.4.9-e.34 and errata glibc 2.2.4-32.11) on HP Carrier Grade Server cc3310.

Effective March 12, 2003, Red Hat Linux 2.1 Advanced Server became Red Hat Enterprise Linux AS v. 2.1. Though some product labels may indicate the older name, the product itself is still considered Red Hat Enterprise Linux AS v.2.1.

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**IMPORTANT** Use Red Hat Linux kernel version 2.4.9-e.34 or later for full system functionality.

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## System Requirements

The system requirements for Red Hat Enterprise Linux AS v.2.1 on HP Carrier Grade Server cc3310 are:

- Red Hat Enterprise Linux AS v.2.1, kernel 2.4.9-e.34 or greater
- BIOS P11 or later
- Firmware
  - BMC: 1.19 or greater
  - FRUUSDR: 5.6.A or greater
  - HSBP: 1.05 or greater
  - ISM: 5.5.4 or greater
- *hp server cc3310 user information diagnostics and utilities resource CD*

## **Distributions Supported on HP Carrier Grade Server cc3310**

Hewlett-Packard has certified Red Hat Enterprise Linux AS v.2.1 and current Updates (kernel 2.4.9-e.34) on HP Carrier Grade Server cc3310. Hewlett-Packard has also certified Red Hat Enterprise Linux AS v.3, for which a separate Support Note is available at <http://www.docs.hp.com/>.

Purchase the Red Hat Enterprise Linux operating system independently from your HP hardware. Red Hat provides its own operating system documentation.

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**IMPORTANT** Do not discard the Red Hat registration card packaged with the Red Hat CDs. Red Hat requires this card to support or replace software.

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The Red Hat Support Notes are also available on the *hp server cc3310 user information diagnostics and utilities resource CD* and at <http://www.docs.hp.com/>. Search keyword cc3310.

## **Important Information About Adding New SCSI Devices**

As new SCSI controllers and drivers are added to the system, the drive order may change. Disable non-boot SCSI controllers with the following procedure:

1. During POST, press **Ctrl+A** to enter the Adaptec Setup Utility.
2. From the menu, select **AIC-7902 A**.
3. From the menu, select **Configure/View SCSI Controller Settings**.
4. From the “Additional Options Section,” select **Advanced Configuration**.
5. Scroll down to “SCSI Controller Int 13 Support.”
6. Press **Enter**.
7. From the menu, select **Disabled:scan bus**.
8. Press **Enter**.
9. Exit the Adaptec Setup Utility by pressing the escape key twice (**Esc Esc**).
10. When prompted, “Save Changes Made?” select **Yes** (press **Enter**).
11. Press the escape key twice (**Esc Esc**).
12. When prompted, “Exit Utility?” select **Yes** (press **Enter**).

## **Preparing your HP Carrier Grade Server cc3310 for Operating System Installation**

To install your operating system:

1. Verify a service partition has been pre-loaded on your system. If not, set one up using the *hp server cc3310 user information diagnostics and utilities resource CD* and the directions below.
2. Install Red Hat Enterprise Linux AS v.2.1.

### **Setting Up a Service Partition**

The service partition contains diagnostics and tools to deal with problems when the system will no longer boot the kernel. Your system should have one pre-loaded. If the **F4** key is visible at the bottom of the screen on initial boot of the system, the service partition is present and you can proceed directly to the instructions in “Installing Red Hat Enterprise Linux AS v.2.1” on page 10.

Use the *hp server cc3310 user information diagnostics and utilities resource CD* and the instructions below if you need to set up a service partition, then follow the instructions to install your operating system.

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**NOTE** The directions for setting up a service partition assume the BIOS gives priority to the CD-ROM drive over the hard drive.

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1. Power on your system and insert the *hp server cc3310 user information diagnostics and utilities resource CD* in the CD ROM drive. The system boots from the CD and displays the Server Configuration Wizard. Click Continue.
2. Select Server Configuration Utilities and click Continue.
3. From the displayed list, select Run Service Partition Administrator and click Continue.
4. Press **3** on the Service Partition Administration Menu to create a service partition. At the prompt, On which drive should a service partition be installed, press the number for the appropriate drive.

<b>NOTE</b>	The service partition is installed on a DOS (FAT) file system and must therefore exist in the first 8 GB of the disk drive. A disk drive must be empty to create a service partition on it. If not, the service partition utility cannot be sure it can create the partition in the first 8 GB.
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5. When you see the following message, press any key and the system reboots:

The service partition was created successfully. The system will now be rebooted. After the reboot, return to this utility and choose the option to format and install software. The service partition will not operate correctly until it is formatted and software has been installed onto it.  
Strike a key when ready...

6. After rebooting, the *hp server cc3310 user information diagnostics and utilities resource CD* software runs again from the CD, displaying the Server Configuration Wizard. Press Continue.
7. Select Server Configuration Utilities and click Continue.
8. Select Run Service Partition Administrator and click Continue to return to the Service Partition Administration menu.
9. Press **4** to format the service partition and install service software on it.
10. At the prompt, Proceed with FORMAT?, press **y** to confirm the partition formatting. Doing so generates the following warning: All data on drive D: will be lost! Are you sure? Press **y** to reconfirm. After service partitions are established, software installation begins.
11. When software installation on the service partition is complete, the following message appears: The service partition has been installed successfully. Strike a key when ready...
12. On the Service Partition Administration Menu, press **Esc** to exit. On the next screen, click Exit.
13. Click OK at the prompt in the pop-up box. Ignore the warning that exiting the Configuration Wizard will cause changes to be lost. Your service partition will not be affected.
14. At the DOS prompt, press **Ctrl+Alt+Del**, remove the *hp server cc3310 user information diagnostics and utilities resource CD* from the drive, and follow the instructions below to install Red Hat Enterprise Linux AS v.2.1.

## **Installing Red Hat Enterprise Linux AS v.2.1**

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**NOTE** Please see the HP Carrier Grade Server cc3310 Product Guide for timesaving hardware configuration and installation information you should consider before installing your operating system.

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1. Power on the cc3310 server and insert Red Hat Enterprise Linux AS v.2.1 installation CD #1 in the drive.
2. Follow the directions in the Red Hat installer when it boots to complete your operating system installation.
3. Update your kernel version to 2.4.9-e.34 or later. See “Registering Software and Getting Updates from Red Hat Network” on page 11 for details.

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**NOTE** When the Red Hat installer boots, you can do a graphical install or a text install. However, if no mouse is connected to the system, the installer proceeds in text mode even if you choose graphical mode from the Red Hat Linux Installer menu.

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### **NIC1 and NIC2 Network Configuration**

When configuring the system with internal network ports NIC1 and NIC2, and no other network port hardware is installed in the system, Red Hat Enterprise Linux AS v.2.1 assigns “eth0” to NIC2, and “eth1” to NIC1. These network ports are labeled on the rear of the system as “1” for NIC1, and “2” for NIC2.

If additional network hardware has been installed into the system, Red Hat Enterprise Linux AS v.2.1 assigns the “eth” numerical values, beginning with “eth0” to the add-on port or ports and assigns numerical “eth” values to the internal network ports last. For example, if a dual port network card was added to the system, those ports become “eth0” and “eth1”.

## **Registering Software and Getting Updates from Red Hat Network**

1. Install Red Hat on your system and reboot.
2. Login as root on the console (HP recommends using the graphical console rather than the text console).
3. Using the registration card number that came with your Red Hat CDs, run the `rhn_register` command to register your system and create an account with Red Hat Network.
4. Communication between your system and Red Hat Network server begins with confirmation of your installed software packages, and optionally, your hardware. Red Hat Network server notes any necessary updates and sends email to the Red Hat administrator to forward the packages to your system when you request an update.
5. To update your system, run the `up2date` command on the console (HP again recommends using the graphical console rather than the text console) to initiate the process with Red Hat Network. Now follow the instructions Red Hat provides.

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<b>NOTE</b>	Red Hat ensures all information transferred is treated as private and confidential. By default, all data sent and received over the network uses the secure sockets layer (SSL).
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Red Hat provides more detailed information on the update process in its documentation.

## **Known Problems**

1. If using USB devices, you must use GRUB as your bootloader. If you select LILO as your bootloader and have any USB devices attached to the machine, LILO hangs on booting.